

REMARKS

Status of the Claims

Claims 1 and 5-37 are pending. Claims 5 and 22 are amended. Claims 36 and 37 are newly added. Support for these amendments may be found throughout the application as originally filed.¹ No new matter is added.

Rejections Under 35 U.S.C. § 112, written description

Claim 5 stands rejected under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement, because the claim contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventors were in possession of the claimed invention. Specifically, the USPTO contends that the specification allegedly describes only OK1 proteins.

Applicants respectfully submit that claim 5 is amended to recite that the isolated protein is an OK1 protein and comprises SEQ ID No.: 5. Accordingly, Applicants respectfully request that this rejection should be withdrawn.

Rejections Under 35 U.S.C. § 112, enablement

Claim 5 stands rejected under 35 U.S.C. §112, first paragraph, because the specification, while being enabling for proteins with α -1,4-glucan phosphorylating activity, does not reasonably provide enablement for any other polypeptides. Specifically, the USPTO contends that the specification is enabling for a method according to claim 1 and for proteins termed OK1, but does not allegedly enable all proteins that bind to phosphorylated alpha glucans.

Applicants respectfully submit that claim 5 is amended to recite that the isolated protein is an OK1 protein, and comprises SEQ ID No.: 5. Accordingly, Applicants respectfully request that this rejection should be withdrawn.

Rejections Under 35 U.S.C. § 102(e)

Claims 5 and 22 stand rejected under 35 U.S.C. §102(e), as allegedly being anticipated by Kikuchi et al. (US 20060123505; hereafter “Kikuchi”). The USPTO contends that Kikuchi teaches the transformation of a host cell and regeneration of a plant with SEQ ID No.:22133 that encodes the OK1 protein from rice. The USPTO further alleges that the “resultant protein, inherently would be obtained by the described methods.”²

¹ See, e.g., Specification at pg. 17, ll. 8-17; pg. 21, ll. 5-10; and pg. 27, ll. 7-14.

² See Office Action at pg. 7.

Applicants respectfully traverse.

Claims 5 and 22 are amended to require that the isolated protein produced by the claimed methods produce an OK1 protein that (i) comprises SEQ ID No.: 5 and (ii) requires phosphorylated α -1,4 glucans as a substrate, respectively. Kikuchi does not teach either of these claimed features. In fact, the nucleotide sequence disclosed by Kikuchi (i.e., SEQ ID No.: 22133) encodes a truncated protein that does not comprise the protein of SEQ ID No.: 5. Further, Kikuchi does not claim an OK1 protein that requires phosphorylated α -1,4 glucans as a substrate.

Accordingly, each and every claim element is not taught by Kikuchi. Applicants respectfully submit that the claims are not anticipated by Kikuchi and that the rejection should be withdrawn.

CONCLUSION

In view of the above remarks, early notification of a favorable consideration is respectfully requested. An indication of allowance of all claims is respectfully requested.

If the Examiner has any questions relating to this response, or the application in general, he is respectfully requested to contact the undersigned so that prosecution of this application may be expedited.

Respectfully submitted,

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Dated: July 5, 2011

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